Amendments to the Claims: This listing of claims will replace all prior versions, and listings of claims in the application:

1. **(Currently Amended)** A method for processing a location information request in a location service, comprising:

[[A.]] a second Gateway Mobile Location Center receiving a location information request ~~initiator sending a location information request~~ sent from a first Gateway Mobile Location Center, the location information request containing a processing indication, and type of the processing indication being used for indicating synchronous processing or asynchronous processing ~~to a location information request receiver~~; and

[[B.]] after receiving the location information request, the second Gateway Mobile Location Center, ~~the location information request receiver determining whether to perform~~ performing synchronous processing or asynchronous processing for the location information request according to the type of the processing indication, and then implementing corresponding processing for the location information request.

2. **(Currently Amended)** The method according to claim 1, wherein,

under the condition that the second Gateway Mobile Location Center ~~location information request receiver, in step B, determines to perform~~ performs synchronous processing for the location information request according to the type of the processing indication, the process ~~step~~ of implementing corresponding processing for the location information request ~~in step B~~ comprises: after a LCS system locates the target UE, the second Gateway Mobile Location Center ~~location information request receiver~~ sending a location information response containing locating result of the target UE to the first Gateway Mobile Location Center ~~location~~

~~information request initiator~~.

3. **(Currently Amended)** The method according to claim 1, wherein,

under the condition that the second Gateway Mobile Location Center ~~location information request receiver, in step B, determines to perform~~ performs asynchronous processing for the location information request according to the type of the processing indication, ~~step B~~ the process of implementing corresponding processing for the location information request comprises:

~~B1. the location information request receiver~~ the second Gateway Mobile Location Center sending a location service response to the ~~location information request initiator~~ first Gateway Mobile Location Center, and releasing the connection resource between itself and the ~~location information request initiator~~ first Gateway Mobile Location Center;

[[B2.]] after receiving the location service response, the ~~location information request initiator~~ first Gateway Mobile Location Center releasing the connection resource between itself and the ~~location information request receiver~~ second Gateway Mobile Location Center; and

[[B3.]] after a LCS system locates the target UE, the ~~location information request receiver~~ second Gateway Mobile Location Center reestablishing the connection between itself and the ~~location information request initiator~~ first Gateway Mobile Location Center, and then sending a LCS service result containing locating result of the target UE to the ~~location information request initiator~~ first Gateway Mobile Location Center.

4. **(Currently Amended)** The method according to claim 1, wherein the type of the processing indication is determined according to type of a processing indication contained in

a location information request received by the ~~location information request initiator~~ first Gateway Mobile Location Center, or according to a parameter of quality of service contained in a location information request received by the ~~location information request initiator~~ first Gateway Mobile Location Center, or according to address type of the ~~location information request receiver~~ second Gateway Mobile Location Center, or according to any combinations of the above manners.

5. **(Cancelled)**

6. **(Currently Amended)** The method according to claim 1, wherein the ~~location information request initiator~~ first Gateway Mobile Location Center is a Requesting Gateway Mobile Location Center, [[is an]] R-GMLC, while the ~~location information request receiver is an~~ second Gateway Mobile Location Center is a Home Gateway Mobile Location Center, H-GMLC.

7. **(Currently Amended)** The method according to claim 1, wherein the ~~location information request initiator is an~~ first Gateway Mobile Location Center is a Home Gateway Mobile Location Center, H-GMLC, while the ~~location information request receiver is a~~ second Gateway Mobile Location Center is a Visited Gateway Mobile Location Center, V-GMLC.

8. **(New)** A system for processing location service, comprising:

a first Gateway Mobile Location Center, capable of sending out a first location information request, the first location information request containing a processing indication,

wherein type of the processing indication is used for indicating synchronous processing or asynchronous processing; and

a second Gateway Mobile Location Center, capable of receiving the first location information request, performing synchronous processing or asynchronous processing according to type of the processing indication contained in the first location information request, and implementing corresponding processing in response to the first location information request.

9. **(New)** The system according to claim 8, wherein the first Gateway Mobile Location Center is a Home Gateway Mobile Location Center, H-GMLC, and the second Gateway Mobile Location Center is a Visited Gateway Mobile Location Center, V-GMLC.

10. **(New)** The system according to claim 8, wherein the first Gateway Mobile Location Center is a Requesting Gateway Mobile Location Center, R-GMLC, and the second Gateway Mobile Location Center is a Home Gateway Mobile Location Center, H-GMLC.

11. **(New)** The system according to claim 10, further comprising: a third Gateway Mobile Location Center; wherein

the second Gateway Mobile Location Center is further capable of sending out a second location information request, the second location information request containing a processing indication; and

the third Gateway Mobile Location Center is capable of receiving the second location information request, performing synchronous processing or asynchronous processing according to type of the processing indication contained in the second location information request, and implementing corresponding processing in response to the second location information request.

12. **(New)** The system according to claim 11, wherein the third Gateway Mobile Location Center is a Visited Gateway Mobile Location Center, V-GMLC.

13. **(New)** A Gateway Mobile Location Center device for processing location service, comprising:

a first unit, capable of receiving a location information request, the location information request containing a processing indication, wherein type of the processing indication is used for indicating synchronous processing or asynchronous processing;

a second unit, capable of performing synchronous processing or asynchronous processing according to type of the processing indication contained in the location information request, and implementing corresponding processing in response to the location information request.

14. **(New)** The device according to claim 13, wherein the Gateway Mobile Location Center device is a Home Gateway Mobile Location Center, H-GMLC, or a Visited Gateway Mobile Location Center, V-GMLC.

15. **(New)** A method for processing a location information request in a location service, comprising:

a location information request initiator sending a location information request containing a processing indication to a location information request receiver, and type of the processing indication being used for indicating synchronous processing or asynchronous processing;

after receiving the location information request, the location information request receiver performing synchronous processing or asynchronous processing for the location information request according to the type of the processing indication; and

when the location information request receiver performs synchronous processing for the location information request according to the type of the processing indication, the location information request receiver sending a location information response containing locating result of the target UE to the location information request initiator after a LCS system locates the target UE;

when the location information request receiver performs asynchronous processing for the location information request according to the type of the processing indication, the location information request receiver sending a location service response to the location information request initiator, and releasing the connection resource between itself and the location information request initiator, and after receiving the location service response, the location information request initiator releasing the connection resource between itself and the location information request receiver; and after a LCS system locates the target UE, the location information request receiver reestablishing the connection between itself and the location

information request initiator, and then sending a LCS service result containing locating result of the target UE to the location information request initiator.

16. **(New)** The method according to claim 15, wherein the type of the processing indication is determined according to type of a processing indication contained in a location information request received by the location information request initiator, or according to a parameter of quality of service contained in a location information request received by the location information request initiator, or according to address type of the location information request receiver, or according to any combinations of the above manners.